

Networking: The Linking of People, Resources and Ideas

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About the Network

Computer Use in Social Services (CUSS) Network is a nonprofit association of professionals interested in exchanging information and experiences on using computers in the social services. Members participate in the Network by:

- Sending materials for the CUSSN Newsletter, such as: (1) member needs, interests, hardware/software use, activities, etc.; (2) information on resources; and (3) longer reports/articles on conferences, surveys, vendor products, ideas, experiences, computer applications, and events.
- Participating in the skills bank, software clearinghouse and SIGs.
- Distributing Newsletters to friends and at workshops and conferences. If you're attending a conference where participants may be interested in the CUSSN, let me know and I will send newsletters to distribute or place on a resource table.
- Referring vendors. If you think a vendor/consultant could benefit by exposure to CUSSN members, tell them, so they can advertise their services and products in the CUSSN Newsletter.
- Holding local CUSSN meetings. Local meetings in Dallas/Ft. Worth, Chicago and Baltimore have been successful. For those in a foreign country, Floyd Bolitho's (see back cover) work in Australia offers a model to follow.

The **CUSSN Newsletter** is published approximately 4 times a year and is sent free to all network members. Institutional and library subscriptions are available for \$15 a

year. For overseas air mail, add an additional \$5 for postage. All prices are in U.S. dollars. Back issues of the newsletter are available for \$2.50 each. Volume 1 has 2 issues. The newsletter is edited by Dick Schoech.

The CUSSN Skills Bank allows members to locate or share specific knowledge, skills and experiences. At present the skills bank permits searches by state or geographic area, by information systems experience and by application, all for the total cost of providing information about yourself. Contact Gunther R. Geiss, Adelphi U., School of Social Work, Garden City, NY 11530, (516) 288-7915

The CUSSN Software Clearinghouse offers a computerized inventory of commercial and public domain available human service software, a software review file, and a software exchange. For more information, write Walter LaMendola, Professor, School of Social Work, U. of Denver, Denver, CO 80208

Special Interest Group (SIGs) are subgroups of network members where significant networking is occurring on a special topic.

Educators SIG, write Wallace Gingerich, School of Social Welfare, U of Wisconsin-Milwaukee, Milwaukee, WI 53201.

Hospital Social Services SIG, write Mike King, Director, Social Work Services, The Staten Island Hospital, 475 Seaview Avenue, Staten Island, NY 10305

Network Dues: See back cover.



"I'm an M.D., a Ph.D., and a Psychoanalyst. I could cope with software and hardware, but... I know that computers can't improve the unique way I work with my patients!"

ABSOLUTELY RIGHT! ... UNTIL PSYCH-PAK™
Now therapists can actually enhance individuation with a comprehensive software program designed to provide clinically sophisticated, non-intrusive assistance in their art.

"What can PSYCH-PAK™ actually do for me? Add up my bills, I suppose?"

It *will* do all of your billing, accounts receivable and insurance forms. Designed to help therapists focus on individual differences, PSYCH-PAK™ organizes the clinical process, from intake to diagnosis to treatment. Thoughts, feelings and observations are entered and recalled in plain English, shaped by your personal approach. Use the computer's memory to recall notes, instantly check out clinical intuitions, and see treatment trends not otherwise visible.

"So it's like a spread-sheet of the clinical process. But do I have to learn programming?"

Not at all. You will never have to learn the first thing about Basic, Cobol, or whatever. PSYCH-PAK™ is programmed to equip you with more data and time to focus on the emotional interaction with your patient.

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PSYCH-PAK™ is "theory free." It handles the broad clinical categories that we all use. Within each area—for example, "Treatment Events"—customize by designating files to build as you work. Add as many specific comments as you like about the session. Some common clinical categories come with your new version of PSYCH-PAK™ such as *D* for Dreams, *R* for Relationships, but you can easily add more.

"Then what? How does that help me?"

Your comments can be brief or as full as you like: Note a dream; at any future point, just call up the dreams of a given period. Or any other dimension you've chosen. Also, you may rate entries from -10 to +10.

"To a working therapist, what good are ratings?"

The ratings are the basis of PSYCH-PAK™'s automatically generated graph of therapy trends. Since you've defined the dimensions, the graph becomes your own "CAT Scan" of therapy. Note when the trend changed, and in seconds review the relevant content, to sharpen your next intervention.

"You mean I can get just that particular session back, or peek at a few others instantly?"

Yes. You can also see the Medication record or the patient's Family History just as easily. PSYCH-PAK™ was designed by a psychoanalyst for self-supervision and "quality control," even before the insurance companies decided we needed it.

"I do quantitative research, and I write lectures and clinical papers using anecdotal illustrations."

With PSYCH-PAK™, you can search for key words and common configurations through many patient's records. You can also work with colleagues and pool data. You will now be able to whip out a report, write a paper or add notes to that book, right from treatment notes, because PSYCH-PAK™ integrates with word processing.

"I don't feel inclined to take notes on every session."

Many experienced clinicians don't—it's so difficult to use written notes, it's not worth it. Having instant *relevant* retrieval

puts an organized "microscope" at your fingertips. A few words after a session will do it; they'll be in the right place. And you *will feel inclined*—PSYCH-PAK™ is so enjoyable it even motivates students to enter notes.

"Sounds great for my private practice but how about my clinic? We're a very diverse group—only thing we have in common is looking for missing charts?"

Yes PSYCH-PAK™ is multi-user and flexible enough to handle every therapist's style. Even in the smallest IBM XT version, three terminals can work at one time. It also runs on mini-computers and mainframes. There is simply no limit to the size of the system that PSYCH-PAK™ will handle, and all the charts will always be available.

"How about administrative reports? We can never figure out our receivables or which student therapist lost too many patients. Can PSYCH-PAK™ help?"

Absolutely. PSYCH-PAK™ is a true relational database manager utilizing the sophisticated PICK system. All the basic administrative reports are built in, plus you can easily format custom reports. Integrated spread-sheet functions make it easy to ask "what if?" with the already entered actual data.

"Is it hard to learn?"

Simply put in a question mark and the computer will tell you what to answer. Two question marks for a listing of your own files. All the instructions are on the screen in plain English.

"I don't have hardware yet. What should I buy?"

PSYCH-PAK™ runs on IBM XT's, and many IBM look-a-likes. To avoid problems, we recommend several configurations for individual group practices, clinics and hospitals.

"Can you sell us a "turnkey system" so we can turn it on and roll? Can you support us while we learn?"

Yes to both questions. Depending on the hardware you purchase, we may install it for free. If you've got hardware that will handle PSYCH-PAK™, we gladly arrange for a software installation, training and support at moderate fees.

"Yes, this is all going to cost money and probably too much! How much is PSYCH-PAK™?"

In the single user version, the introductory price for PSYCH-PAK™ is \$1,500. A complete basic IBM system, with letter quality printer and a 20 megabyte hard disk, and all the necessary software will cost you only about \$8,000.

"Can I see a demonstration? And how can I get more specific information?"

Just contact us to arrange it.



COMPUTER PSYCH, INC.

119 East 36th Street New York, NY 10016 (212) 889-2000

Services Available

Vendor/Consultant	Contact Person	Services
California		
Berkeley System Design 1708 Shattuck Ave. Berkeley, CA 94709	Lawrence H. Boyd, Ph.D. (415) 540-5535	BSD designs microcomputer-based information systems for human services organizations. We offer advanced technologies in form generation and form-based decision support systems for the administration and evaluation of service programs. Where necessary, strategies allow for the integration of these easy to use systems with existing information systems.
Illinois		
E&P Associates, Inc. 664 N. Michigan Ave. Chicago, IL 60611	Lynn Harold Vogel, Ph.D. (312) 962-1429 or 984-1815	Specialists in the provision of consulting and data processing services to the human services, health care, and insurance industries; Staff has average of over 14 years experience in assisting Fortune 500 & small organizations in addressing computer related & other managerial needs.
OUTP ST, Inc. Drawer CNC5 119 Wilson St., Park Forest, IL 60466	F. Dean Luse, Ph.D., CSW, President (312) 748-3854	Consultation on feasibility and information system planning. Provides help with accountability, forms & report design, decision support systems, database development, software selection & evaluation, training your staff to use computer systems Extensive micro and mainframe computer experience.
SPSS, Inc. 444 North Michigan Ave. Chicago, Illinois 60611	John Gayton, Marketing, (312) 329-3500	SPSS, Inc. provides software for human services survey and data analysis, tabulation and report-writing for mainframes, IBM PC, DEC Pro 350.
Synergistic Office Systems (SOS) 438 Peterson Road Libertyville, IL 60048	David Kropp, ACSW Joseph Zefran, MSW (312) 680-8383	A full-service team of professionals who provide software designed especially for human service agencies (Fund Accounting, Client Service/Billing, Donor Information), a full range of services (feasibility studies, analysis, programming, training, support), and single- and multi-user hardware systems.
Maryland		
KBL Group, Inc. 'Knowledge Based Living' 808 Pershing Drive #100 Silver Springs, MD 20910	Karen Levitan, Ph.D., President, (301) 588-4633	Services to help you use information, technology, and systems as professional resources. We work for you; we work with you; we help you do it yourself.
New York		
CWIS/Agency Information Management Services, Inc.,	David Bresnick, Executive Director, Baruch College, 17 Lexington Avenue, New York, NY 10010 (212) 725-3156	Services offered: automation consulting services (micro specialization), preparation of RFPs, custom software development, training workshops and seminars. Special application software available for Medicaid Billing, Foster Parent Payment, Case Management, Financial Management for the not-for-profit environment.
Gunther R. Geiss, Ph.D. 8 Meadowlark Ln. Huntington, NY 11743	(516) 692-5414 or 489-2000	Consultation and Training (from executive to operators) Emphasizing Microcomputer Systems for Human Service Providers.
King Associates 215 Shoreward Drive Great Neck, NY 11021	Michael A. King, D.S.W. (516) 487-5995	Microcomputer applications for social work and hospital discharge planning—customizing available—IBM, Apple.
New York/New Jersey		
RFM/Associates, Inc. One Bridge Plaza. Suite 400 Ft. Lee. NU 07024	Rod Monger, PhD, (201) 592-5895	A consulting and training firm whose associates are academics and experienced professionals. Services include programming, management development and training, systems design technical writing, planning, security audits, and personnel searches. Write for brochure with full description of services. No charge for initial consultation. Micro specialization.

Rhode Island

Applied Innovations, Inc. 800-272-2250
 South Kingstown Office Park 401-789-5081
 Wakefield, T.I. 02879

A developer and manufacturer of over 20 software programs designed to operate on popular microcomputers. The programs are fully supported, documented and operational in hundreds of locations. Programs assist with Psychological testing (eg MMPI) office management (eg billing/insurance forms) or Assessment (eg psychosocial histories).

Texas

Dick Schoech, Ph.D. (817) 265-0459
 1311 W. Lavender Ln.
 Arlington, TX 76013

Consultation and training on information systems feasibility, design, implementation and evaluation. Access to varied technical expertise of University setting.

Washington (District of Columbia)

Gibson-Hunt Associates Gail Gibson Hunt,
 Suite 500 President
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 Washington, DC 20006

Planning and implementation support to health and human services organizations in the areas of program and project management, program evaluation, delivery system design and the application of information systems and computer technology.

Washington State

Lee-Haight Assoc. Cathy Lee-Haight, MSW
 7027 14th N.W. (206) 782-6227
 Seattle, WA 98117

Social service, computer, and management professionals offer information, consultation, and training for human services.

Australia

Human Services Floyd Bolitho, Ph.D.,
 Information Systems (03) 687-6790,
 6 Chapman Blvd (03) 459-1806
 Glen Waverly
 Victoria 3150

Consultation for Human Services, feasibility studies, training, systems design and implementation. Software Development and hardware vendor.

The above paid advertisements represent no endorsement or favorable review by CUSS. When choosing a consultant, remember the standard advice: (1) talk to more than one consultant, (2) obtain several comparable bids, and (3) ask for several recent clients and talk to them about their satisfaction.

Service Listing Announcements: Interested vendors/consultants should send payment along with their description. Rates are as follows.

Description length	Rate per issue	Rate per year (4 issues)
under 15 words	\$ 5	\$18
under 30 words	\$ 8	\$28
under 45 words	\$10	\$34
under 60 words	\$12	\$40

Space Advertisements: Advertising space is available in the CUSS Newsletter at the following rates:

one eighth page in one issue = \$15 one half page in one issue = \$45 one full page in one issue = \$75
 one fourth page in one issue = \$25 three fourths page in one issue = \$60 two full pages in one issue = \$120

Advertisers must furnish a copy ready ad. If the ad will be run for four issues, a 25% reduction in cost is granted.

Mailing Labels: Mailing labels are available at the cost of 5 cents per label.

Notes from the Editors

Although it is still 100 degree weather in Texas, I admit that Summer is over and this issue is late. Hopefully, the next issues will be more on time.

The Fall issue will be a special listing from the Software Clearinghouse. While it has taken time to become organized, the results should be worth the wait.

The Winter issue will provide details of the CUSS electronic network which we are developing. Included will be node information, access procedures, etc. Also, the Winter issue will contain the annual listing of the Network Roster.

Dick Schoech, Editor and Coordinator
 September 10, 1985

Articles, Reviews and Reports

CUSS Electronic Network Survey: Results and Future Plans

by Dick Schoech, CUSS Editor/Coordinator

The Survey

For several years, members of the Computer Use in Social Services (CUSS) Network has been interested in using the capabilities offered by an electronic network. This publication is too slow and cumbersome for true networking. Also, true networking requires something of all participants.

Since much information during networking is generated by members, having enough members to generate a rich base of information is very important in a CUSS electronic network. 150 - 200 active members is seen as necessary to provide enough information, so that something new will usually be available when users log on to the system. If use is not rewarding, participants will soon drop off, consider the network a novelty, and not renew their membership.

Last year, CUSS received support from Apple Computer Corp. and the Department of Health and Human Services, Office of Human Development Systems, Office of Program Development (HHS, OHDS, OPD) to investigate the interest of CUSS Network members in electronic networking. Since CUSS is a loose association with no full time staff, we decided to proceed cautiously to before joining an existing network. A survey of members was the first step taken.

Summary of Results

The overall results of the survey are as follows.

- Of approximately 900 sent, 268 useable questionnaires were returned 153 said they would probably subscribe to the network
- Most interest existed in software, references and funding information.
- \$50 a year was what most individuals would pay for an electronic network, the average was \$103. Information quality was more important for individuals than low cost.
- Software information is most associated with people subscribing. Other important features are exchanging information (E mail and BBS), references, tutorials, and user groups.
- Individual willingness to pay was associated with software demos, hardware based user groups, and funding information.
- \$100 a year was what most organizations would pay for an electronic network, the average was \$279.
- Organizations willingness to pay was associated with features such as classified advertisements, software demos, funding information and hardware based users groups.
- Respondents slightly favored CUSS operating its own network rather than joining an exiting network.
- Slightly over half had not used an electronic network.
- Of the 36 respondents who are using a network(s), about half were dissatisfied. The average cost was \$29 per month.
- Many CUSS members would be using the network during day-time (office) hours, the time when rates are highest.

Overall, the survey found considerable interest in electronic networking, but little capacity to pay. This finding supports discussions with existing HHS networks which seem to be having problems finding those willing to pay for their electronic network services.

Detailed Findings

Interested in Using the Network

Would probably subscribe	Mean = 3.694
Have the necessary hardware/software	Mean = 3.902
Will have hardware/software in a year	Mean = 3.939
Information quality = biggest factor	Mean = 4.458
Low cost = biggest factor in use	Mean = 3.902
Ease-of-use = biggest factor in use	Mean = 3.434

Features Respondents Would Use [descending order]

Would use software information	Mean = 4.440
Would use references	Mean = 4.176
Would use funding information	Mean = 3.992
Would join service-based user group	Mean = 3.907
Would use demos of software products	Mean = 3.863
Would use bulletin board feature	Mean = 3.808
Would use DBMS set-ups	Mean = 3.764
Would join software-based user group	Mean = 3.735
Would use spreadsheet templates	Mean = 3.519
Would join hardware-based user group	Mean = 3.413
Would use electronic network feature	Mean = 3.359
Would use classified advertising	Mean = 3.340
Would use tutorials	Mean = 3.310

Ability to Pay for Network

Yearly rate individual would pay	Mode = \$50	Mean = \$103
Yearly rate organization would pay	Mode = \$100	Mean = \$279
Organization interested in group rates	Mean = \$3.146	

Type of Use

Hours/mo. individual may use system	Mode = 5	Mean 6
Hours/mo. organization may use system	Mode = 10	Mean = 12
Would use during work hours	Mean = 3.107	
Would use during off-hours	Mean = 3.916	

Other Information

CUSSN should operate its own network	Mean = 3.550
CUSSN should join an existing network	Mean = 3.263
Have previously used a network	Mean = 2.809
Currently use a network	Mean = 1.852
Satisfied with the network (1)	Mean = 2.568
Monthly cost of current network	Mode = \$10 & \$20
	Mean = \$29

Correlations with Question: "I (or my organization)" would probably subscribe to the electronic network"

Question	Correlation	Responses	Significance
Would use software information	0.455	232	0.000
Would use electronic network feature	0.412	234	0.000
Would use references	0.404	233	0.000
Would use bulletin board feature	0.395	234	0.000
Would use DBMS set-ups	0.386	235	0.000
Would join software-based user group	0.362	233	0.000
Would use tutorials	0.374	231	0.000
CUSSN should operate its own network	0.337	201	0.000
Would join hardware-based user group	0.329	233	0.000
Would join service-based user group	0.324	232	0.000
Would use funding information	0.320	234	0.000
Would use classified advertising	0.308	233	0.000
Would use demos of software products	0.294	235	0.000
Would use spreadsheet templates	0.289	234	0.000
Information quality is biggest factor	0.289	229	0.000
Have the necessary hardware/software	0.254	228	0.000
Ease-of-use is biggest factor	0.252	225	0.000
Would use during work hours	0.251	222	0.000
Currently use a network	0.217	170	0.005
Have previously used a network	0.197	222	0.004
[the following have significance above .05]			
Would use during off-hours	0.184	227	0.006
Monthly cost of network now using	0.162	42	0.307
Hours/mo individual may use system	0.085	149	0.304
CUSSN should join an existing network	0.073	199	0.309
Low cost will be biggest factor	-0.066	229	0.676

Where 1 = no and 5 = yes

Correlations with Question: "Yearly Rate Individual Would Pay"

Question	Correlation	Responses	Significance
Hours/mo individual may use system	0.185	127	0.035
CUSSN should join an existing network	0.181	127	0.039
Would use demos of software products	0.177	143	0.032
Monthly cost of network now using	0.169	32	0.641
Would join hardware-based user group	0.168	141	0.044
Would use funding information	0.166	145	0.043
[The following have significance above .05]			
Would use during off-hours	0.145	141	0.083
Ease-of-use is biggest factor	0.134	142	0.108
Would use during work hours	0.112	139	0.188
Would use classified advertising	0.103	140	0.224
Would use spreadsheet templates	0.092	142	0.277
Would join software-based user group	0.089	142	0.292
Would use electronic network feature	0.088	143	0.298
Information quality is biggest factor	0.068	143	0.573
Would use software information	0.064	142	0.547
Would join service-based user group	0.052	143	0.542
CUSSN should operate its own network	0.047	129	0.602
Would use tutorials	0.034	139	0.692
Would use bulletin board features	0.003	143	0.973
Would use references	0.009	144	0.907
Have the necessary hardware/software	-0.075	141	0.620
Currently use a network	-0.068	97	0.515
Low cost will be biggest factor	-0.090	141	0.289
Have previously used a network	0.122	136	0.155

Where 1 = no and 5 = yes

Correlations with Question: "Yearly Rate Organization Would Pay"

Question	Correlation	Responses	Significance
Would use classified advertising	0.228	124	0.011
Would use demos of software products	0.226	126	0.011
Would use funding information	0.224	126	0.011
Would join hardware-based user group	0.196	125	0.026
[The following have significance above .05]			
CUSSN should operate its own network	0.176	114	0.057
Would use spreadsheet templates	0.148	126	0.095
Hours/mo. organization may use system	0.146	108	0.127
Would use electronic network feature	0.145	126	0.101
CUSSN should join an existing network	0.143	110	0.133
Would use tutorials	0.139	123	0.122
Would join software-based user group	0.126	125	0.158
Monthly cost of network now using	0.111	25	0.604
Would use software information	0.107	124	0.235
Would use DBMS set-ups	0.105	127	0.238
Would use bulletin board feature	0.099	126	0.271
Would join service-based user group	0.022	125	0.804
Would use references	0.021	125	0.815
Have previously used a network	0.019	121	0.831
Currently use a network	-0.088	83	0.563

Where 1 = no and 5 = yes

Bar Charts of Findings

Would use electronic network feature

Response	Percent of Total
No	**** (37)
Possibly no	***** (43)
No Opinion	***** (33)
Possibly yes	***** (87)
Yes	***** (62)

Would use bulletin board feature

Response	Percent of Total
No	*** (18)
Possibly no	**** (23)
No Opinion	**** (27)
Possibly yes	***** (116)
Yes	***** (77)

Would use classified advertising

Response	Percent of Total
No	***** (30)
Possibly no	***** (39)
No Opinion	***** (53)
Possibly yes	***** (87)
Yes	***** (50)

Would use references

Response	Percent of Total
No	** (9)
Possibly no	*** (13)
No Opinion	**** (25)
Possibly yes	***** (91)
Yes	***** (124)

Would use software information

Response	Percent of Total
No	* (3)
Possibly no	** (6)
No Opinion	*** (12)
Possibly yes	***** (91)
Yes	***** (147)

Would join service-based user group

Response	Percent of Total
No	*** (15)
Possibly no	***** (26)
No Opinion	***** (29)
Possibly yes	***** (87)
Yes	***** (102)

Would join hardware-based user group

Response	Percent of Total
No	***** (26)
Possibly no	***** (37)
No Opinion	***** (57)
Possibly yes	***** (82)
Yes	***** (57)

Would join software-based user group

Response	Percent of Total
No	**** (21)
Possibly no	**** (25)
No Opinion	***** (33)
Possibly yes	***** (104)
Yes	***** (77)

Would use tutorials

Response	Percent of Total
No	***** (26)
Possibly no	***** (52)
No Opinion	***** (45)
Possibly yes	***** (86)
Yes	***** (49)

Would use funding information

Response	Percent of Total
No	*** (14)
Possibly no	**** (22)
No Opinion	**** (26)
Possibly yes	***** (91)
Yes	***** (110)

Would use demos of software products

Response	Percent of Total
No	*** (18)
Possibly no	**** (21)
No Opinion	**** (31)
Possibly yes	***** (101)
Yes	***** (91)

Would use DBMS set-ups

Response	Percent of Total
No	*** (19)
Possibly no	**** (28)
No Opinion	***** (37)
Possibly yes	***** (91)
Yes	***** (88)

Would use spreadsheet templates

Response	Percent of Total
No	**** (23)
Possibly no	***** (35)
No Opinion	***** (49)
Possibly yes	***** (85)
Yes	***** (67)

Maximum yearly rate individual would pay

Response	Percent of Total
0010	** (4)
0015	*** (6)
0020	**** (12)
0025	***** (25)
0030	*** (7)
0035	* (1)
0040	* (1)
0050	***** (29)

0060	** (4)
0075	* (1)
0080	* (2)
0100	***** (23)
0120	** (5)
0150	* (1)
0175	* (1)
0200	*** (9)
0240	* (1)
0250	* (1)
0300	*** (6)
0325	* (1)
0500	** (3)
0600	* (1)
1000	* (1)
1200	* (1)

Maximum yearly rate organization would pay

Response	0	10	20	30	40	50	60	70	80	90	100
0020	** (4)										
0025	** (3)										
0035	* (1)										
0050	*** (9)										
0060	* (1)										
0070	* (2)										
0075	** (5)										
0100	***** (36)										
0150	*** (8)										
0200	***** (15)										
0240	* (2)										
0250	*** (9)										
0300	** (5)										
0360	* (1)										
0400	* (1)										
0500	***** (12)										
0600	* (2)										
0800	* (1)										
1000	** (5)										
1200	** (3)										
2400	* (1)										
2500	* (1)										

My organization's funding sources may be interested in group rates

Response	0	10	20	30	40	50	60	70	80	90	100
No	***** (50)										
Possibly no	*** (11)										
No opinion	***** (44)										
Possibly yes	***** (72)										
Yes	***** (35)										

I (or my organization) would probably subscribe

Response	0	10	20	30	40	50	60	70	80	90	100
No	*** (10)										
Possibly no	*** (17)										
No opinion	***** (55)										
Possibly yes	***** (106)										
Yes	***** (47)										

Hours per month individual may use system

Response	0	10	20	30	40	50	60	70	80	90	100
01	***** (22)										
02	***** (27)										
03	***** (18)										
04	*** (12)										
05	***** (39)										
06	** (5)										
07	* (2)										
08	** (4)										
10	***** (24)										
13	* (1)										
15	* (2)										
20	*** (7)										
24	* (1)										
30	* (2)										
40	* (1)										

Hours per month my organization may use system

Response	0	10	20	30	40	50	60	70	80	90	100
01	**** (12)										
02	***** (20)										
03	** (4)										
04	*** (10)										
05	***** (18)										
06	** (3)										
08	*** (6)										
10	***** (25)										
15	** (3)										
16	* (1)										
20	***** (17)										
24	* (1)										
25	** (3)										
30	** (5)										
40	** (5)										
50	* (2)										
99	* (2)										

Would use during work hours

Response	0	10	20	30	40	50	60	70	80	90	100
No	***** (37)										
Possibly no	***** (52)										
No opinion	***** (32)										
Possibly yes	***** (92)										
Yes	***** (30)										

Would use during off-hours

Response	0	10	20	30	40	50	60	70	80	90	100
No	*** (15)										
Possibly no	***** (29)										
No opinion	***** (27)										
Possibly yes	***** (69)										
Yes	***** (109)										

Low cost would be the biggest factor in my subscribing

Response	0	10	20	30	40	50	60	70	80	90	100
No	*** (12)										
Possibly no	*** (22)										
No opinion	***** (40)										
Possibly yes	***** (85)										
Yes	***** (95)										

Ease-of-use would be the biggest factor in my subscribing

Response	0	10	20	30	40	50	60	70	80	90	100
No	*** (21)										
Possibly no	***** (30)										
No opinion	***** (54)										
Possibly yes	***** (108)										
Yes	***** (36)										

Information quality would be the biggest factor in my subscribing

Response	0	10	20	30	40	50	60	70	80	90	100
No	** (6)										
Possibly no	* (4)										
No opinion	*** (12)										
Possibly yes	***** (77)										
Yes	***** (154)										

I have access to the necessary hardware/software

Response	0	10	20	30	40	50	60	70	80	90	100
No	***** (51)										
Possibly no	*** (12)										
No opinion	** (6)										
Possibly yes	***** (28)										
Yes	***** (158)										

I will have access to the necessary hardware/software within a year

Response	0	10	20	30	40	50	60	70	80	90	100
No	***** (13)										
Possibly no	*** (6)										
No opinion	***** (25)										
Possibly yes	***** (36)										
Yes	***** (67)										

CUSSN should operate its own network

Response	0	10	20	30	40	50	60	70	80	90	100
No	*** (14)										
Possibly no	*** (12)										
No opinion	***** (90)										
Possibly yes	***** (50)										
Yes	***** (56)										

CUSSN should join an existing network

Response	0	10	20	30	40	50	60	70	80	90	100
No	***** (21)										
Possibly no	***** (23)										
No opinion	***** (87)										
Possibly yes	***** (50)										
Yes	***** (36)										

I have used an electronic network

Response	0	10	20	30	40	50	60	70	80	90	100
No	***** (128)										
Possibly no	* (1)										
No opinion	** (6)										
Possibly yes	*** (12)										
Yes	***** (99)										

I currently use an electronic network

Response	0	10	20	30	40	50	60	70	80	90	100
No	***** (141)										
No opinion	** (6)										
Yes	***** (36)										

I am satisfied with the first electronic network I now use

Response	0	10	20	30	40	50	60	70	80	90	100
No	***** (31)										
Possibly no	*** (5)										
No opinion	***** (14)										
Possibly yes	***** (19)										
Yes	***** (17)										

I am satisfied with the second electronic network I now use

Response	0	10	20	30	40	50	60	70	80	90	100
No	***** (25)										
Possibly no	*** (2)										
No opinion	***** (11)										
Possibly yes	***** (7)										
Yes	***** (5)										

The monthly cost of my using the electronic network

Response	0	10	20	30	40	50	60	70	80	90	100
003	** (1)										
005	** (1)										
008	*** (2)										
010	***** (8)										
012	** (1)										
015	***** (6)										
020	***** (8)										
025	***** (5)										
030	**** (4)										
040	** (1)										
050	***** (5)										
075	** (1)										
080	** (1)										
115	** (1)										
150	** (1)										

Location of respondent

Canada - 24	Australia/New Zealand - 4	England - 1	Israel - 2
01463 - 1	02114 - 2	01040 - 1	01063 - 1
04102 - 2	04107 - 1	04870 - 1	03263 - 1
07090 - 1	08225 - 1	08854 - 1	04941 - 1
10023 - 1	10034 - 1	10549 - 1	10000 - 1
10577 - 1	10603 - 1	11003 - 1	10562 - 1
11050 - 1	11215 - 1	11238 - 1	11040 - 1
11507 - 1	11550 - 2	11554 - 2	11500 - 1
11801 - 1	12222 - 1	12223 - 1	11743 - 1
12942 - 1	13210 - 2	13668 - 1	12243 - 1
15907 - 1	17551 - 1	18102 - 1	14301 - 1
19010 - 1	19047 - 1	19103 - 2	18634 - 1
20000 - 1	20006 - 1	20009 - 1	19107 - 1
20201 - 1	20814 - 1	21136 - 1	20036 - 1
21201 - 2	21204 - 3	21209 - 1	21157 - 1
21403 - 1	21502 - 1	21740 - 1	21212 - 1
22090 - 1	22101 - 1	22193 - 1	22041 - 1
22206 - 1	23229 - 1	26505 - 1	22205 - 1
27608 - 1	27705 - 1	28560 - 1	26506 - 1
30608 - 1	30742 - 1	31904 - 1	29425 - 1
32207 - 1	33134 - 1	33325 - 1	32204 - 1
33629 - 1	35401 - 1	37996 - 1	33435 - 1
43081 - 1	43214 - 1	43220 - 1	38302 - 1
44319 - 1	45202 - 2	45218 - 1	43223 - 1
45690 - 1	45701 - 1	46220 - 1	45387 - 1
46634 - 1	46953 - 1	47906 - 1	46614 - 1
48104 - 2	48109 - 2	48185 - 1	48103 - 1
48901 - 1	49008 - 1	49023 - 1	48187 - 1
49707 - 1	50614 - 1	52803 - 1	49503 - 1
53222 - 1	53233 - 1	53523 - 1	53201 - 1
53706 - 1	54401 - 1	55101 - 1	53704 - 1
55404 - 1	55411 - 1	55415 - 1	55155 - 1
56401 - 1	57197 - 1	59405 - 1	56001 - 1
60141 - 1	60466 - 1	60600 - 1	60014 - 1
60610 - 1	60611 - 1	60614 - 1	60603 - 1
60625 - 1	60637 - 2	60680 - 1	60615 - 1
61462 - 1	61801 - 1	62701 - 1	61072 - 1
63103 - 1	63121 - 1	63139 - 1	62901 - 1
66502 - 1	67401 - 1	68434 - 1	66045 - 1
71134 - 1	74136 - 1	74301 - 1	70802 - 1
75201 - 1	75644 - 1	75962 - 1	75069 - 1
76011 - 1	77004 - 2	77042 - 1	75963 - 1
77087 - 1	77701 - 1	77704 - 1	77057 - 1
78207 - 1	78212 - 1	78723 - 1	78040 - 1
78769 - 1	80122 - 1	80208 - 1	78758 - 1
81004 - 1	82002 - 2	83702 - 1	80515 - 1
84403 - 1	85016 - 1	87501 - 1	84121 - 1
90502 - 1	92117 - 1	92646 - 1	90024 - 1
94063 - 1	94115 - 2	94122 - 1	93705 - 1
94706 - 1	94960 - 1	95819 - 1	94607 - 1
96813 - 1	96817 - 1	97206 - 1	96766 - 1
97214 - 1	97401 - 1	97459 - 1	97213 - 1
98119 - 1	98195 - 2	98270 - 1	98105 - 2
99004 - 2	99516 - 1	99687 - 1	98702 - 1

Options Available for CUSS

Several possible options for CUSS members to network electronically exist. As the survey pointed out, the overwhelming criteria for evaluating the options are low cost.

1. CUSS could operate its own network. However, then long distance telephone service becomes a costly proposition. About 200 users are needed at \$100—\$200 a year to break even on the phone bill. That excludes free memberships and connect time for those running the system.

2. Commercial networks average \$20 to \$40 per month per user. Partnership DataNet offers low cost rates on CompuServe, but CompuServe is often crowded and reports by groups such as ours are not always favorable. The American Association of University Affiliated Programs (AAUAP) sets up networks for non-profits. The only cost is a per hour connect time charge of \$14.50 evening and \$16.50 day. AAUAP could set up a special CUSS network with access to mail from GTE Telenet and CompuServe. Several human service groups, such as Special Net and AdoptNet, now use the AAUP Network. United Way is considering starting its own network. This may be an option in the future.

3. FIDONET consists of approximately 800 MS-DOS micros across the U.S., Canada, England, etc. which exchange mail and files each night between 2 and 4am. The structure of FIDONET resembles CUSS (loose and decentralized) and CUSS could start its own network using FIDONET and would have complete control over what is done and what is charged. The only FIDONET charge is the long telephone paid by local nodes which is about 23 cents per long distance message. However, since FIDONET is decentralized, national conferencing and user groups are difficult to maintain.

The Choice for CUSS

Given the small amount of money people have to devote to networking, and the necessity of getting as many people involved as possible to make the network rich in information, we decided to use FIDONET to experiment with networking. In essence, we can stick our neck out and try networking and not risking anything but our time and effort.

The Winter issue will detail our efforts and provide information on how to access the CUSS electronic network. Anyone with access to a modem who is interested in helping test the electronic network we are developing, let me know. □

Selected Findings of Four Surveys of Human Service Computer Use

by Jaros, Levi, Larson, and Baskin and Seiffer.

MH/MH Computerization Study from Kenneth Jaros, Research Associate, Community Health Services Division, U. of Pittsburgh, Graduate School of Public Health, Dept. of Health Services Administration, Pittsburgh, PA 15261.

This study concerned computerization of a MH/MR agencies in the Western Region (22 Counties) of Pennsylvania during late 1984. Kenneth would be happy to share the full results of the study with others in the field. Selected findings appear below.

- 111 of 48 agencies responded resulting in a response rate of 75%
- Over half of the agencies (55%) were to some degree computerized.
- Among the non-computerized group, the majority felt their agency would be computerized within 2 years. If money was available, most of these agencies would have been computerized.
- Administrators attitudes toward computers tended to be the key factor related to the agency decision to computerize. Administrators generally felt ill-equipped to understand and manage the process of adoption.
- Good training was the factor most associated with successful system operation and with satisfaction in general.
- While training for administrators was improving, direct service staff were being left out of the process.

State-of-Computerization of the Jewish Federation Agency Network, from Linda Levi, Director Management Assistance Program, Federation of Jewish Philanthropies of N.Y., 130 E. 59th St., NY, NY 10022.

Based on previous surveys indicating a high need for technical assistance in data processing, the present survey was sent out in December 1983 to determine the present "State-of-Computerization." The complete survey report and related information is available from the Federation. Selected findings appear below.

- 44 of the 69 agencies responded resulting in a return of 64%
- 16 agencies had some in-house computer capacity.

- 40 agencies (including 10 with in-house systems) purchased data processing capacity from a service bureau.
- Reasons for satisfaction with in-house systems were: time and cost savings and ease of information retrieval. Reasons for dissatisfaction were system limitations, the high cost of modifying software, and the need for staff training.
- The importance of beginning with an assessment and clarification of an agency's management information needs prior to purchasing or accepting equipment cannot be stressed strongly enough.
- Concern was expressed over the donation of outdated equipment that was difficult and expensive to service.
- Staff often have unrealistic expectations, as well as fears of dehumanization and the loss of jobs, autonomy and control.
- While office automation can lead to efficiencies and more attractive-looking work products, actual cost savings are not always forthcoming.

Area Agencies Computer Usage Survey from Pam Larson, National Assn. of Area Agencies on Aging, 600 Maryland Ave. S.W. #208, Washington, D.C., 20024.

This survey of Aging Agency computerizations was conducted in the Fall of 1984. A more complete report can be obtained by writing Pam Larson. Selected findings are as follows.

- 452 agencies responded resulting in a response rate of 68%
- 68% were using a data processing system. Half of those who were not intended to purchase data processing equipment in the next 12 months.
- Applications and the percent of agencies using the application were:
 - Word processing, 78%
 - Spreadsheet analysis, 58%
 - Contract monitoring, 68%
 - Client reporting, 61%
 - Accounting, 51%
 - Personnel records, 43%
 - Client tracking, 38%
 - Case management, 22%

NAAA is presently in the process of compiling a catalogue of microcomputer software, stimulating the development and distribution of "high priority" software packages, and forming user technical assistance support groups.

A Nationwide Survey of Computer Utilization in Community Mental Health Centers from David Baskin, Associate Director, and Samuel Seiffer, Program Analyst, Albert Einstein College of Medicine, Sound View-Throgs Neck CMHC, 2527 Glebe Ave., Bronx, New York 10461.

A survey covering the (1) community mental health center, (2) MIS, (3) hardware and software, and (4) assessment of the system was sent to 648 community mental health centers in the U.S. Selected findings follow.

- 256 of the 648 centers responded resulting in a response rate of 40%.
- 61 centers reported a manual MIS, 220 a computerized MIS, and 8 no MIS.
- MIS functions and the number of center MIS performing the functions are:
 - research and evaluation (253)
 - client visit date (233)
 - caseload (229)
 - staff productivity (225)
 - billing (204)
 - budget and accounting (176)
 - payroll (148)
 - inventory (73)
 - other (46)
- Of those who have used a service bureau and who have experience with their own system, an overwhelming 86% indicate that in-house processing is superior.
- 142 used custom designed applications, 76 used packaged applications, and 61% had written some of their own programs.
- Data processing costs averaged 3.1% of the total Center budget.
- 40% felt the MIS reduced costs, 33% felt it increased costs and 27% felt it had no effect.
- 86% felt the MIS increased efficiency, 5% felt it reduced efficiency, and 9% felt it had no effect.

Review of MUMPS User's Group Conference and National Computer Conference by F. Dean Luse, PhD., President, OUP ST Consulting.

MUMPS User's Group Conference, Chicago, IL, June 1985. The MUMPS User's Group held its annual conference in Chicago, in June 1985. This is not one of the "biggie" computer conferences, as a result you probably did not hear about it in the regular computer magazines and other information channel. MUMPS, and its offspring COSTAR, have been well-kept secrets. It seems that MUMPS and COSTAR users talk primarily to each other, and have not been telling the rest of the world. Perhaps this is a national result of public domain software which does no promotion or advertising.

The conference included three and a half days of meetings, exhibits, a variety of tutorials on MUMPS, File Manager, & COSTAR, and field visits to local agencies with installations of their software.

MUMPS is an acronym for a database management system developed at Massachusetts General Hospital with federal grants. It is in the public domain. That means MUMPS is available at a nominal fee, usually the cost of copying the magnetic tape and documentation. MUMPS is a powerful and flexible relational database management system that can handle variable length records. File Manager provides the Application Development capabilities including a Query language and Report generator. A number of versions are available. A single user version for micro computers, and multiuser, multi-tasking versions for mini and main frame computers are available. There are also enhanced versions available from commercial vendors. MUMPS is used predominantly in hospital settings where there are functional modules for registration, admission, scheduling, transfer, discharge, clinics, etc. See CUSS Newsletter Summer 1984 special issue on MUMPS.

COSTAR is an acronym for COmputer STored Ambulatory Record and refers to a large set of programs developed to provide complete medical office management. It is built on MUMPS, and many modules can be applied in settings other than medical. COSTAR is also in the public domain. The very large number of modules make it difficult to run on a micro computer unless a hard disk and large RAM space is available.

Tutorials ranged from MUMPS for beginners to advanced for programmers. A laboratory with 24 terminals was available for students and for the curious to gain hands-on experience. A book exhibit showed an extensive collection of specialized MUMPS books, mostly available through the User's Group.

The program included 'technical' sessions on screen design, documentation, networking, designing efficient systems, artificial intelligence, software management, user/software interfaces, measuring system performance, report generators and query languages; and specialty applications in nursing, pharmacy, clinical lab, medical office practice systems, small business systems, business applications, and statistical uses. The VA users and other special interest groups also met.

It is an eye-opener for a first-time attendee at a MUMPS conference to discover how many people are involved, and the diversity of agencies using this software. These systems should be used more by the human services as they are powerful and modestly priced. There are a number of problems: they are not well known nor widely advertised, and are never in a computer store; programmers tend to be specialized and not well known; File Manager, the application development and report generator tool, is sometimes awkward and not as user friendly as some commercial systems; and screen displays are not as smooth and sophisticated as some commercial systems. The later two shortcomings are being improved.

Next year the conference will be in San Diego, June 9 to 13, 1986. For further information: MUMPS User's Group, 4321 Hartwick Road, Suite 510, College Park, MD 20740 (301) 779-6555. COSTAR User group, 348 Rancheros Drive, San Marcos, CA 92069 (619) 471-2100.

National Computer Conference '85, Chicago, IL June 1985 (BIG... Glitzy...Shiny...Colorful...Ostentatious...Busy.) Over 300 exhibitors, with the exhibits covering space of more than 8 football fields, and 80,000 people in attendance. A very different scale and ambience than our 'people' conferences. It is sponsored by the American Federation of Information Processing Societies (AFIPS).

The emphasis in this show was on hardware, but there were many software and other exhibitors as well. In addition to the exhibits there were 84 sessions schedule during the week covering a wide range of topics from end user computing, educational and societal issues, personal computing, to future architectures of computers, but some speaker stalked to only a few dozen attendees. The jam-packed exhibits were clearly where the action was. This is one of the major annual computer shows and regularly covers the broadest spectrum of interest from

micro, to mini, to mainframe computers and related equipment, supplies, and services. It is weak, however, on the special interests, such as human services, although there were sessions on applications for the handicapped.

The items of major interest to me and the human service, seemed to fall in to 4 categories of new technology: software trends, printers, hard disks, and LANS (Local Area Networks). I noticed only one MUMPS vendor present and they weren't showing MUMPS here.

The software market is becoming more user friendly, although this is an industry buss word to be taken with a grain of salt. There is more concern for the end user, linking with main frames and mini computers, improved documentation, and training. Integration of functions is clearly a goal, but the major efforts of the last few years to integrate into a single program are losing steam. Emerging strategy is to develop functional modules that work together, accessing and passing data and information between them. Most of the 'integrated' packages require huge amounts of RAM, are relatively complex, and to meet critical space limits, the designers made many compromises with functionality.

Artificial Intelligence (AI) and the use of natural languages are contributing to a simpler interface with the user and systems that are easier to use. These are now only emerging and will likely have greater impact in the future. AI appears to have much potential for the human services.

Powerful relational database management systems and non-procedural (4th Generation) programming languages promise to revolutionize information systems. Databases, using these methods, provide more flexibility to meet the demands of a fluid and dynamic environment, and programmers improve their productivity as much as 5 fold, to over 100 fold for some activities. These involve a fundamental change shifting concern from *how* to do the job in the computer to *what* is to be done. With these systems the software takes care of the how and arranges the flow of the computer activities, traditionally the job of the system designer and programmer. These methods greatly reduce the time required to obtain results from the computer, greatly reduce the cost, and do so with far fewer errors.

Two new printer technologies: lasers and thermal methods were being shown. Very new and not yet in wide distribution (except for the IBM QuietWriter) were new thermal printers. In the next year or so they are likely to be the 'hottest' printers on the market. They print on plain white paper (not the old special waxy paper) using heat to transfer the ink from the ribbon to the sheet. These are very quiet, produce very clean, crisp, black characters, in letter quality, with sheet feeders or continuous fan fold paper. At about 60 characters per second, they are faster than most daisy wheel, but slower than dot matrix printers. At \$1,500 to \$2,000 they represent a very attractive alternative to impact printing.

The greatest interest was in the laser printers. Introduced last year for the micro office environment these modestly priced, fast, versatile, and quiet desk top printers are available from a number of manufacturers. Priced from \$4,000 to \$6,000 and printing 8 or more pages a minute these can be very cost effective. Some models combine graphics and text on the same page, permitting you to print a form and the data at the same time. Using plain paper you can prepare insurance claims, progress reports, or applications for reimbursement or funding. These produce letter quality output with a variety of printer fonts under software control.

Competition in the hard disk field has produced smaller disks with greater capacities, at lower costs, and a major shakeout of the industry. Due to the intense competition and the pell mell push of new technologies, few, if any, of the disk companies are making a profit, and a number of major companies are in bankruptcy or just hanging on. Half height disks with over 30 megabytes (30 million characters) of formatted space are now available at the relatively modest cost of around \$4,000. Faster and more compact tape backups, and removable disk backups are also commonly available. In addition to their size and capacity, they also offer faster access times, and claim greater reliability. One 30 megabyte disk with a 10 meg removable disk, with a key lock (like an ignition key) to control access to the data, fits into less than a 2 inch high space between your main PC computer cabinet and your monitor.

These conditions in the industry offer many opportunities to users, but there are risks. Many of the units are designed with components relatively standard in the industry making replacement of faulty parts relatively simple regardless of the survival of the manufacturer. The growth of 3rd party maintenance firms, which is another development of note, assures a viable service availability for many units after the warranty. If you select an appropriate unit and service firm, this can relieve users of total dependence on the manufacturer or dealer.

Maturing much in the last year, networking is beginning to make a serious impact on the field. The ability to interconnect a number of micro computers, or drive a number of terminals with a single micro computer, moves 'computing' in an office to a much more sophisticated level. Multi user and multi tasking systems provide much more power to an agency for retrieving, and updating records, preparing and printing reports. While there has been much improvement in this technology, no clear standard has emerged and a number of competing approaches are available. This is a technology on the brink and it probably will not settle down for another one to three years. Networking requires an intimate hardware and software interface and is not to be entered into without careful analysis and planning. Much of the software currently in use on micros is designed for a single user and will not work for multiple users in a network. There is, however, an increasing number of sophisticated software packages designed specifically for networking.

This big, showy conference was one of the best I've attended. It is geared for both experience professionals and novices. There is much to see and much to learn by asking questions. If you are interested in computing in the human services, plan to attend. Next year NCC will be in Las Vegas June 16-19. Many dealers and consultants can provide free or discount tickets to the exhibits. □

MICRO-NOTES by Tom Neudecker, Assistant Vice President of Academic Affairs, Carnegie Mellon University, 5000 Forbes Ave., Pittsburgh, PA 15213.

Three years ago several of the major vendors started R & D projects to develop advanced micro computer workstations. IBM and DEC, and others, funded projects at several universities. New hardware and software products from these efforts can be expected in the near future. What will these new products look like? Here is CUSS contributor Tom Neudecker's predictions & guesses.

These new products are expected to close the gap, in price and performance, between micro-computers and the power and functionally of scientific work stations or small mini-computers. The workstations are known as 3-M computers (not to be confused with the well known manufacturer of magnetic media the 3-M corporation). In this case the first "M" represents the RAM in the machine, one megabyte, the second tells that the screen display's resolution is one million pixels, and the third indicated that the CPU is capable of one million instructions per second (MIPS).

The power of these workstations will further the transition from centralized computing facilities to distributive networks of these new workstations. Many corporate and scientific mainframe users have already migrated to distributed networks of super-micros or mini's costing much more than these new 3-M machines. Expect the trend to continue as the price of the new hardware declines as the cost of RAM and IC chips drop. These new prices will mean that hardware companies can manufacture and sell a 3-M engine at a price acceptable to the education market.

Influencing the development of the 3-M machine is the pressure from the InterUniversity Consortium for Educational Computing. This consortium of the major computer science universities is negotiating with major hardware vendors. The goal of these talks are to insure that each vendor's new workstation product is compatible with ICEC's hardware and software standards, such as the ability to run the Berkeley Unix operating system (or other compatible Unix versions). ICEC reported that it expects that more than one vendor will release a 3-M workstation during the next 18 months that is compatible with the ICEC hardware standards and priced under \$3,000. ICEC is developing programming

tools for these machine that will allow for the easy development of graphically oriented educational software. These programming tools are being designed to free the teacher from the problems of programming structure and syntax so that they can focus upon pedagogical issues.

Industry analyst are suggesting that these new work stations will have the power to emulate both MS-DOS and Macintosh operating systems as a shell under 3-M workstation's UNIX operating system. This means that a 3-M workstation could provide upward software compatibility for current micro users, assuming that Micro Soft and Apple license their operating systems.

These new workstations are important to the human services agency where users are not concerned about bits and bytes. The price and performance of this next generation technology will result in the transfer of software written for \$100,000 plus minicomputer to systems based on these new boxes. So small agencies, with small budgets will be able to efficiently establish a comprehensive MIS on a desktop computer. Secondly, these machines will use the Xerox-Parc concept of windows and icons that was popularized by the Apple Macintosh. This user interface is very friendly, and will save a bundle of training dollars, that are already in short supply in the social service.

Expect these machines during the next eighteen months, and then watch the marketing battles as the vendors move to establish their product. In the meantime don't postpone buying decision. □

Reply to Micro-Notes, (Part II The Issue of Clones, Look-a-Likes, & Compatibles, Spring 85, page 11-12).

Hats off to Gordon Krantz for taking on the micro-notes advisor who resides in the ivory tower at the Cathedral of Learning. Gordon inspired this reaction to the last micro-notes on compatibles.

Again, Dr. Neudecker gave the conservative line which goes something like this "sure a compatible is cheaper and often better, but if you don't know a lot about computers, better go with IBM." In other words, no one has been fired for buying "Big Blue."

Well, no one has been fired, but the company may have gone bankrupt paying IBM prices. These days, we out here in human service agencies where "the rubber hits the road" cannot afford to take Neudecker's advice and go first class. Agencies rarely get the discounts on computer equipment that Academics do, and never get invited to those nice fancy sales meetings that Neudecker talks about. We have large data processing needs and little cash.

I mail order all my computer equipment out of the back of computer magazines or buy from a local "Computer Jock" for about 1/2 the price of IBM. I always buy at least two of each item, so I am never stranded if one breaks down. If things last two years, I often consider them obsolete and get a newer model, usually with greater capacity for half the old cost. Sure, this approach takes a little more time and learning on my part, but I figure my time learning about computers has been the most cost beneficial thing I have done in the last several years.

So my advice is to write IBM prices in your grants and budgets, but buy two good cheap IBM clones instead. Then have a staff party with the remaining change to help eliminate the real problem with computers, getting staff to use them in their work.

I am withholding my name, because IBM may follow Apple's lead and establish a community grants program. I don't want my name on the bad list in one of the IBM's computers, in case I apply for an IBM equipment grant.

Sincerely,

Brand X □

Member Comments and Activities

Network Activities

California CUSS Network group to meet from Jim Gardner, Fairview Developmental Center, 2501 Harbor Blvd., Costa Mesa, CA 92626 (714-957-5421).

The California CUSS Network group which was brought together at the May meeting of the Western Psychological Association continues to flourish. They have developed their own newsletter relevant to California issues and concerns (Can you surf with a micro?), and have already issued two editions. They will be sponsoring a series of resource workshops at the Regional meeting of the American Association on Mental Deficiency in Oakland from October 31 to November 1. Interested people should contact Jim Gardner.

Report from Australia CUSS Group from Norman Smith, Director, Human Resource Centre, Dept. of Social Work, La Trobe University, Bundoora 3083.

The current Australian membership of CUSS now stands at 53 made up of nearly equal numbers from Victoria and N.S.W. Because of this growth and the associated organizational demands, coupled with the fact that Floyd Bolitho is on overseas study leave, responsibility for CUSS is now in the hands of the Human Resource Centre.

The Human Resource Centre was established in 1977 by the Department of Social Work at La Trobe University as another means of developing links between the community, training and research resource. In 1982 Lincoln Institute of Health Sciences entered into collaboration by jointly sponsoring the Centre so as to enable a partnership to develop which now offers a broad interdisciplinary involvement in the health and welfare field.

Since joining the Centre as the Director at the end of 1984 I have been shifting its focus more to the area of communications and information management in the Human Services. To this end the Department of Social Work has agreed to the purchase of a micro computer for use in the department and the Human Resource Centre.

This acquisition, the 'Pulsar 9000' micro computer, is the very latest in technological development, produced by a local Australian company operating in Victoria. For the technically inclined the details are as follows:

16 Bit 80186 micro processor, 8MHZ with a 20 megabyte hard disk drive, a 1-8" floppy disk drive. TURBODOS is the operating system.

The micro will allow up to 60 users at any one time (we will start with 3) and is capable of supporting a large variety of soft-ware. Together with a high quality printer the equipment will be housed in the Human Resource Center making it convenient for the small informal workshops the Centre will be planning around micro-computers.

Workshops will be planned on the following lines; first, workshops organized for people with no knowledge of computers, giving them an opportunity for hands on experience coupled with some information input. Second, workshops for those with some knowledge of computers who want to learn something more specific, like testing new software, or developing their own software modules. Third, focusing on a specific type of application such as a DBM system and developing a prototype application suitable for Human Service organizations. Fourth, the facility could be available in the form of 'surgery' where individuals with difficulties might come for consultation or demonstration purposes. Finally it will be possible to experiment with a data base built around the written resource material available in the Centre, to be made available to telephone enquirers.

It is envisaged that the equipment would enable the HRC in particular to develop as a real 'Resource Center'. At the moment information within the Centre is either in people's heads or on pieces of paper in filing cabinets and as such it is not a true 'resource' since it is not amenable for access and dissemination.

The aim is to develop a computerized database around three related 'files' of data, namely organizations, personnel with special resources and areas of interest. The relational database would allow us to retrieve specific information, like people with special resources to meet specific areas of interest or organizations who have specific resource personnel. In this way information could be accessed and disseminated quickly when specific requests were made as well as allowing the database to be continuously updated. It would also allow us to study what information was requested and those areas where information was missing. It is considered that software currently available for micros like DBase II and DATAFLEX are best and most easily suited for this purpose. With the capacity of the Pulsar 9000 it would be feasible to con-

sider modifying the system through the addition of a 'communication board' to allow telephone access to the database by outside users.

Planning is already underway to ensure that in future all B.S.W. students graduate from the La Trobe Social Work course will have the opportunity for hands on experience during the 2 year course. Since 'Information Management and Computers in Human Services' is already taught as a course on the M.S.W. program it will mean that those students will have greater scope to learn the subject using the micro.

As a result of a flying visit to Sydney the other week and a talk to Brian English in the Department of Social Work at the University of N.S.W. tentative plans are underway to launch a conference through the H.R.C. on 'Micro computers in the Human Services' for Australian CUSS members and other interested persons. It will probably be held in May 1986 and the venue looks like being Canberra, since this is a suitable mid-point for both Victoria and N.S.W. participants.

Education/Training

Report from the "Electronic Social Service Office Project," from Roger Lohman, Professor, Electronic Social Service Office Project, School of Social Work, West Virginia U., Morgantown, WV 26506.

We finally had a budget breakthrough at West Virginia University which allowed us to acquire some PC hardware and software. We now have four 512K Macintoshes in the School which are shared among faculty, students and staff. Personally, I've had my own "Mac" for nearly a year and a half now, and I'm more convinced than ever that the Mac is a perfect machine for social workers. We presently have two book manuscripts, about two dozen journal articles and two dissertations on various diskettes.

In our building we have two computer labs (under the administrative control of the College of Human Resources and Education): One, with about 20 ADDS terminals allows direct access to the WYLBUR test editor and the IBM-CMS and VAX machines, all of which are part of WVNET mainframe system which links all higher education computing in the state. Among other things, this means that students and faculty in our Charleston Center have access to the identical resources as students and faculty on the main campus in Morgantown.

The other is a micro-computer lab, originally set up for teachers but getting extensive use now by social work students. They have a prudent blend of IBM, Radio Shack, Apple II, and Macintosh equipment. In particular, we have a group of 8-10 international students, from Korea, Malasia and Hong Kong who have been particularly interested.

For the past several years, students in my computer course have been "batch processing" with SPSS and SAS through WYLBUR, but this summer I made the break, and we now are doing direct, interactive statistical and data processing work with interactive SAS through CMS. Turns out that the latter, while more complex, sophisticated and elegant, is also easier to teach to beginning users!

Last Spring for the first time, students in my Administration course turned in their assignments through our electronic mail system (WVMail). It proved to be a very worthwhile experiment which allowed me to give them direct feedback with very fast turn-around time. I'm planning to keep that feature of the course again next year.

Last year the Dean did the School's budget for the first time on our Macintosh using Multiplan and fed the necessary data directly into her budget memo to central administration with the "cut and paste" features. This year, we expect to fully integrate the budget spreadsheet with an ongoing financial record system I have set up on Overvue. Among other things, our system will include a "tracking system" which allows us to keep track of the multiple stages of requisition approval in the university system, and have up-to-date daily estimates of remaining funds by budget category.

We also "automated" recordkeeping for our annual Summer Institute on Aging this year. The entire mailing list, as well as course registrations, receipts, course rosters for instructors, agency billings, and miscellaneous other information for about 300 participants were integrated into a DBMaster file. (We chose DBMaster over other DBM software because it can be expanded on Mac to up to 44 disks!)

My biggest project in recent years has been "The Social work Scholar", a set of inter-related data bases using SPIRES (Stanford University DBMS) and the Mac. The main SPIRES program at present is The Sourcerer, a modular bibliographic file supporting my personal interests (administration, economics, rural social work planning and computing). It currently has about 1700 entries, with another 500 or so still to go to get caught up. It is not a "public utility", but a personal professional resource.

Also in the system are files of quotations, reading notes, excerpts,

clippings and snippets (The Quotier), and a system of Reference Lists (The Refer?) which will allow backward and forward searches of chains of bibliographic citations, and an index of my personal library and files of xeroxed and mimeographed papers I've picked up in various places. I'm currently exploring various large-scale text storage options, including microfiche, optical scanners, etc. for fully integrating this aspect of the system with the rest.

I'm currently attempting to master uploading of files from Mac into CMS and SPIRES. (Downloading has proven to be a breeze with MacTerminal.)

One of the most fun and interesting things I've done has been "Lindblom County", in which I simulated the interactive (and incremental) budget dynamics of 10 funding sources and twenty five agencies (five each very large, large, medium, small and very small sized) in a rural environment using Multiplan. The system contains about 1200 equations, and is "driven" by a set of simple regression equations based on 10 estimates of a program's popularity, need, political climate, etc. The program takes anywhere from 10-45 seconds to recompute all formulas on my 128K Mac, but is considerably faster on the 512's.

I'm working out a modular design for "Lindblom County II" based on the first version which will allow full presentation of standard budget reports, more refined regressions and open-ended addition of new agencies, programs and funding sources.

I've also set up a "box" of eight demonstration program disks which I call "The Social Work Office" and which I use for workshops, demonstrations, etc. The "Office" contains a number of different word processors, data base managers, Multiplan, MacPaint, etc. together with a number of different social work relevant application-demonstration documents.

Finally, I've worked out a general algorithm which I call "The Interviewer" which can be easily written up in any computer language. It will handle a "stack" of questions and keep the answers in a file in the order they are entered. I've made it work in WYLBUR-EXEC, BASICS and SAS.

I would enjoy hearing from anyone who is interested in more information about any of these developments. I've prepared brief 1-2 page writeups on most of them and would be glad to share these with any CUSS member who writes to me. For Mac owners with Multiplan, single-disk copies of Version 1 of Lindblom County are available for a small fee.

Health and Mental Health

Cognitive Psychologist/Software Specialists Available from Robert Reitman, PSYCOMP Self-Help Software, POB 994, Woodland Hills, CA 91367.

I have some interest in sharing my research work via publications such as yours. We call our work "imitative intelligence, as opposed to AI, for what we believe is pretty good reasoning (computers can help people to think more clearly and help them help themselves in turn). One of the things we are working on now involves the importance of internal inflections in problem-solving self-talk (both successful and preventive).

Final item: after almost three years of trying to hold our own financially in the erratic software market, we have had to cut back to holding our own (filling orders, tech support but no completion of additional programs or further program research). That means that two interested and talented people with terrific backgrounds in cognitive-type psychology (and eleven years of clinical work in cognitive therapy) and systems analysis with actual programs—are "available," as they say. Any suggestions?

Building a MUMPS based MIS, from Bill Schicht, 1315 Jefferson, Apt 219, Jackson, MS 39292.

I work for the Department of Mental Health where we are working to obtain a MUMPS-based system for MIS. Any information or advice would help.

Building Ecosystemic DSS from Raymond Carlson, Ph.D., School of Social Work, Dalhousie University, Halifax, Nova Scotia, B3M 1V1, Canada.

Complexifying Outcome Assessment to Increase the Usefulness of a Clinical Data Base for Mental Health Services.

For years, those of us involved in outcome assessment have been forced to emphasize keeping data simple. Computer support has increased the opportunity to consider complex constructs by collecting several specific information items, integrating these items through a computer program, and presenting a simple, straightforward interpretation.

Utilization remains non-complex even though the concepts or construct involved require confusing processing.

Such an approach allows focusing on more valid content, since outcome concepts like level of functioning are complex. In addition, such an approach increases the likelihood that data will be sensitive to change because of its specificity. Complexity also allows the data base to connect with more issues as well as more varied previous research.

I am currently involved in testing some modified outcome measurement instruments that are oriented toward specific information on the status of the multi dimensional features relevant to the outcome of services for those with long-term forms of mental illness. Eventually, I plan to integrate this data into a decision support system built around a clinical data base and using a knowledge base particularly emphasizing ecosystemic intervention.

I would be interested in hearing from anyone else involved in a related task.

Substance Abuse and Agency Software Needed, from Patrick M. Clancey, Administrator, The Patrician Movement, 222 E. Mitchell, San Antonio, TX 78210

The Patrician Movement is a non-profit substance abuse treatment program with residential and outpatient facilities.

Currently, The Patrician Movement is not utilizing any internal computer systems. However, we have initiated an indepth investigation of various computer systems and software. As of yet, our on-line date has not been targeted, but we are eager to become actively involved in networking.

Data Base Management Applications in Substance Abuse Treatment Programs from Jim Sorg, Northeast Research, P.O. Box 30, Orono, Maine, 04473 Phone (207) 866-5593. BITNET node: Maine User Name: SNR900.

Northeast Research has been developing a compiled dBase III program that gathers and reports client and treatment information for substance abuse treatment providers. We would like to communicate with counselors and administrators who work in this field to get feedback about the direction we have taken with the software and to explore extensions of it that are useful to treatment providers.

We would especially like to learn about the data management needs of treatment programs that combine family treatment with treatment of the primary substance abuser.

Northeast Research carries out treatment outcome evaluations for substance abuse programs. Our software is being used by our clients for these services and by other treatment programs that collect and process information for quality assurance purposes or to automate reports that they are required to submit to state agencies.

Software for Small Agency Needed, from Amy Rassen, Assistant Executive Director, Jewish Family & Children's Services, 1600 Scott St., San Francisco, CA 94115.

We currently have two computer systems at Jewish Family & Children's Services, an IBM PC and an Apple IIe. Main functions include word processing, data base management, spreadsheet work and telecommunications (sending texts, accessing bulletin boards and our own Parents Resource Bulletin Board—415/563-1043). We're looking into an IBM AT or a mini for total client data storage and total accounting capabilities.

It would be ideal if we were able to identify already existing software that includes an accounting package with a file manager. Any suggestions?

Disabilities

Integrated System for Vocational Rehabilitation Being Developed, from Susan Hemphill, Texas Rehabilitation Commission, 118 E. Riverside Dr., Austin, TX 78704.

Texas Rehabilitation Commission (TRC), the State Vocational Rehabilitation agency, is integrating micro computers into the VR process. In the past, computer support had been in the form of information reports generated from a central mainframe and mailed to various TRC offices. Micro computers will allow for interactive and immediate exchange of information. The Automated Information Division of TRC is in the process of examining administrative, clerical, and counselor information needs in an effort to develop an integrated information system involving mainframe, micro, and manual systems. The goal of integrated automation is to make information processing faster, more efficient, and more accurate with the intent of freeing staff time for more client-centered activities.

If anyone is involved in automation of the VR process, I would appreciate the opportunity to share ideas.

Programs Needed for Apple to Use with Austic Children, from Fran Bussard, Clinical Director, Listen Foundation, POB 212, Ben Lomond, CA 95005.

I am an LCSW running a Range B home for autistic children. Our agency was given an Apple IIe, but at present have no money to buy a printer or programs. Does anything exist in the public domain that will help?

Defense-aerospace Companies and Disabilities Organizations Join On Technology Project, Excerpted from the Washington Post, David S. Broder, June 12, 1985.

Washington — Some of the major aerospace and defense companies are about to get an offer they cannot refuse. Battered almost daily by disclosures of overpriced parts, improper gratuities, inflated profits, and minimal taxes, they are being given a chance for redemption.

This week the chief executives of some 55 defense-aerospace companies are getting letters from the Seattle-based Concepts for Independent Living. The letters will ask for contributions of money and volunteer help to harness the high technology of the military and space programs to improve the lives of severely handicapped and disabled people in this country.

The goal is to raise an initial fund of \$3 million to \$5 million to create a 50-state network of offices, each served by a toll-free 800 phone number, where handicapped people can seek help on their individual problems.

Around each of these "tech net" offices, the plan is to build a "tech team," volunteers of defense-aerospace engineers who will work one-on-one with the disabled to devise equipment that will improve their lives.

I heard about the project last week at a breakfast with Boeing Co. treasurer Jack B. Pierce, the chairman of Concepts for Independent Living, and his best friend in government, Secretary of Health and Human Services Margaret M. Heckler. The cause is a passion they share, and after hearing them I'm convinced they are going to get what Pierce calls "the space program for the disabled" off the ground.

Whatever it offers the industry, this program's potential for the disabled is clear. The "tech net" concept has been tested in South Carolina since 1983 with a federal grant, and Pierce's group is launching a more ambitious version of it — partly staffed by handicapped people — in Seattle this year.

But as Heckler said, "we haven't even scratched the surface" of what might be done. The notion that technologies developed to allow human to survive in the alien environment of space, or in the hostile environment of warfare, can be used to help disabled people cope with the challenges of their daily environment has both practical sense and emotional appeal.

"There is nothing more challenging than putting an engineer up against a quadriplegic or a brain-injured person," Pierce said, "and saying, 'See what you can devise that will help him cope.' There's a kind of magic in it."

An example can be found at the Baltimore-based Volunteers for Medical Engineering, most of whose 200 members are employees of Westinghouse. John Staehlin, the head of the group, said its members have developed with the Johns Hopkins Medical School an electronically driven device that gives people with severely damaged hands much greater control and flexibility of their fingers. Staehlin echoes Pierce's judgment that "the company is thrilled with the expansion of skills, and it's been great for morale."

The goal is to expand the "tech net" centers to Texas, Kansas and Pennsylvania next year, and to all states by 1988. Through the "800" phone lines, disabled and handicapped people will be able to find out what kind of equipment and assistance is available, and will be put in touch with a "tech team" volunteer.

That engineer or technician will try what Pierce calls "tin-bending" — adapting existing technology to meet the individual needs. The volunteer will take the unsolved problems back to the shop for further work.

"I know from my own experience," Pierce said, "that there is tremendous satisfaction in this." Add to that what Heckler calls "a chance for salvation" for a beleaguered industry, and you can see why it's an offer that can't be refused.

Child Welfare

Needed: Packaged Software for Adoptions and Child Welfare, from Sandra Enos, Computer Workshop, Inc., 16 Lilac St., Warwick, RI 02889.

I am a free lance consultant focusing my energies on computers in non-profit organizations and have been looking for an organization or resource for materials and support.

I would appreciate your forwarding me any information you may have. I am currently researching the availability of packaged software programs for a private adoption and child welfare agency.

Comprehensive Software for Children's Home Being Developed, from Alex Petrus, Assistant Director, Development and Interpretation, Berea Children's Home, 202 E. Bagley Rd., Berea, OH 44017.

The Berea Children's Home is an agency that has served children and families since 1864. Presently eight (8) social service programs comprise the continuum of services being offered, ranging from residential treatment to outpatient counseling. In 1980 the agency purchased a Hewlett Packard HP 250 minicomputer. The software was developed conjointly with the professional information planning corporation (PIPC) of St. Louis, MO. At this time there are 10 agencies utilizing some type of PIPC software on a Hewlett Packard minicomputer. PIPC has available a financial package (FIN) and donor information system for fund raising (DIS). A third software package (The Berea Children's Home and 3 other child care agencies helped PIPC develop) is nearly complete entitled the Client Management System. This system is capable of tracking, reporting, researching, documenting, and evaluating treatment efforts in child caring agencies. This new and exciting program will be presented at the National Association of Homes for Children National Convention in St. Louis, Mo. on 9-12-85. The Client Management System has been designed to encompass the general routines of an agency with the system being personalized to each agency's own treatment approach by PIPC. This system is sold as an integrated package in meeting all of the agencies needs.

The Berea Children's Home plans to use the Client Management System to perform both on-going and longitudinal research on treatment effectiveness by 6-86.

The ten (10) agencies using PIPC software have formed a users group which meets 3 times annually to discuss applications and suggestions for enhancements by the professional information planning corporation. Our agency is very pleased with the software systems in place thus far (DIS and FIN) and anticipate having the Client Management System on line by 1-85.

General

Hints Needed on Using the Apple PFS Series, from Dianne Rehin, 604 Newton St., Eau Claire, WI, 54701.

At my office we have an Apple IIe and PFS Write, File & Report software. We've got the PFS Write figured out, but need time and insights of others to help us realize the potentials of our software.

I&R Automation & LANs, from Richard Butler, Planning/Information Coordinator, Boulder County United Way, 2955 Baseline Rd., Boulder, CO 80303.

Currently, I am the Planning/Information Coordinator for Boulder County United Way. We are planning to automate our Information and Referral service as well as building a data base on human services in the county. Additionally, we are interested in local area networks and their applications.

Policy Analyst with Varied Interests, from Tim Griffin, 1918 S. Pennsylvania, Denver, CO 80210.

I am currently a Policy Analyst Consultant with the Colorado Dept. of Education. My current interests are: microcomputers in education, computerized decision support systems; and computer software applications for projection and forecasting using demographic data.

Consumers Lament, from Dick Schoech

Is should be fun to get a new computer, unless you make the mistakes always talked about in the literature. The warning when buying computer equipment is always "be sure the company is reliable and will be still there when you need repairs." Also, "nobody got fired for buying IBM." Thus, I decided to buy an IBM PC AT and use state contract prices.

During the traditional wait for the PC AT, I saw the AT prices drop several hundreds of dollars, until they were below the state contract price I had paid. Thus, I felt I paid almost list price for my AT by the time it arrived. When the machine arrived, I did another thing that is suppose to be correct, read the manuals. When formatting the hard disk, I got a message which indicated there are 20,480 bytes in bad

sectors. I read through the manuals and nowhere did it mention that this message would appear on the screen. Obviously, I figured something was wrong with the hard disk. I usually work on an old Kaypro where 20K of disk space is not to be wasted. I also remember reading all the rumors about the AT's hard disk problems. So, I called the local IBM office.

The "PC Help" person seemed to "think" that 20K of bad sectors was not a problem, but they were not sure. I was referred to the IBM 800 repair number. There the attitude was different. Seems like I had a problem and they gave me a repair authorization number. All I had to do was take the machine 25 miles (that's city traffic miles) to the repair shop. It took many frustrating minutes for me and the purchasing office to convince IBM that this is not a repair, but a faulty machine, and that they, not we, should take the computer to the repair shop. But persistence prevailed. They picked up the machine. The next day, the repair center called and wanted to know where the key was for the computer. Seems like the person who picked up the machine forgot to take the key, and the machine could not be repaired without the key. Well, I make the 50 mile trip and delivered the key.

When I got the machine back, I again formatted the hard disk and get a message that says 10,240 bytes in bad sectors. I also notice the hard disk was noisy. I call the repair man. He says the old disk was

good, that 20K in bad sectors was within tolerable manufacturers limits, and he just put in a new disk because I wanted one. Yes, the new disk was noisy, but the noise of a disk is hard to predict. He said I could bring the computer in and he would try to get a quieter disk (the original disk had already been sent back to IBM). I proceeded to make another call to get the necessary authorization number and another 50 mile trip to take it in and another 50 miles to get it back. I turned on the machine, and the hard disk was somewhat quieter. When I formatted the hard disk, I found I now have 60K bytes in bad sectors. I decide that 60K is probably within tolerable limits, and that I am better off not risking the chance of getting another noisy hard disk. The next day a friend of mine who just purchased a 20mb hard disk dropped by. The company had come out to his house and put in his disk. When formatted, his disk had no bytes in bad sectors!! Subsequently, I found others have not had this problem.

The moral must be "live and learn" but what did I learn? It may be the following:

Don't use advertised prices for a reference.

Your computer will always be much cheaper the day after you buy it.

As in medicine, try to get a second and third opinion about things.

Most people do not know what they are talking about, even IBM with a computer that has been on the market for a year.

Resources and Materials

Funding Sources

The Department of Health and Human Services, Office of Human Development Services announced its coordinated discretionary fund program in the September 4 1985 Federal Register. Many areas included computer systems components. 20 page grant applications are due before 20 Nov 1985. One category specifically addresses the "Use of Modern Technology in Aging Services."

The Apple office of Special Ed. Programs works with key educational institutions and human service agencies to identify the computer-related needs of disabled individuals and to assist in the development of responsive programs. Initially the Office's agenda will focus on activities designed to increase awareness and understanding of computer applications within special education, and to facilitate professional and consumer access to information about software and hardware availability. Contact Alan Brightman, Apple Computer, Inc., 20525 Mariani Ave., Cupertino, CA 95014 (408) 973-6484.

Basic Research in Behavioral and Social Sciences, from Basic Research Office, U.S. Army Research Institute, 5001 Eisenhower Ave., ATTN: PERI-BR, Rm 6n50, Alexandria, VA. 22333.

Proposals are invited in the following areas:

1. Planning, Problem Solving and Decision Making

a. Understanding the nature of individual, hierarchical, and distributed decision making, with attention to the following factors: how knowledge is used by experts, stress effects on cognitive processes, and the impact of incomplete and dynamic information.

b. Improving planning, problem solving and decision making through training, both individual and collective. Particular attention should be given to the process of developing expertise, including both knowledge and strategies, and to establishing foundations for the design of decision aids.

2. Unit Performance

a. Models of goal-directed unit performance are needed as foundations for developing training, assessment and evaluation methods. These models must account for performance of hierarchically organized units in adversarial mission-oriented contexts, with ill-structured problems, rapidly changing conditions, and probabilistic rather than deterministic solutions.

b. Instructional theory is needed to train teams for coordinated action, particularly for procedural flexibility to meet non-predictable conditions. Recent theories of metacognition may prove useful here. The role of computers for unit training should be explored, especially simulations, intelligent tutoring systems, and interactive videodisk.

3. Skill Building Technologies

a. Knowledge acquisition in complex technical domains, such as radar or mechanics, and the use of that knowledge to operate, maintain and trouble-shoot complex systems. This includes knowledge representation, theories of transfer and similarity, both surface and deep,

and training for transfer, including the use of metaphors, analogies and other forms of examples.

b. Instructional strategies, with particular attention to the knowledge needed for developing intelligent tutoring systems. This includes research on knowledge acquisition, theories of tasks and explanations, tutoring principles, and student model generation. Work in this area should build on opportunities for learning provided by new technologies, such as simulations and interactive videodisks. Exploration of new technologies to accelerate learning and increase retention to knowledge and skills, including the assessment and development of psychomotor skills, is desired.

c. Increasing cognitive flexibility and creativity in problem solving situations and mental workload enhancement, particularly under time pressure and other forms of stress.

4. Designing Systems for People

a. Knowledge of the systems design process is a basic requirement for selecting, configuring and delivering timely information about human capabilities and consequences to designers. Information about the needs and methods of designers is sought to determine what, how and when personnel information is best supplied to integrate personnel skills and capabilities into systems in the design process.

b. Relative effectiveness of different media and formats for delivery of information in the engineering design environment and means for determining optimal points in the system design cycle for introduction of different levels of personnel information.

Electronic Information Utilities and Networks

PsyComNet is an on-line telecommunications service for mental health professionals which has electronic mail, real-time conferencing, data libraries, and bulletin boards to share clinical and research information. Contact I. Goldberg, NY Psychopharmacologic Inst., 1346 Lexington Ave., NY, NY 10128 (212) 876-7800.

4-Sight Network, is a telecommunications information service for individuals who are blind. Contact Benjamin Pumo, Assoc. Director, Greater Detroit Society for the Blind, 16625 Grand River, Detroit, MI 48227 (313) 272-3900.

Tribal Telecommunications Network contains information on Indian Child Welfare and adoptions. Contact the Diffusion Center, American Indian Law Center, Inc., POB 4456-Station A, Albuquerque, NM 87196 (505) 277-5462.

Paperchase is a new feature on CompuServe which allows subscribers to access 2.8 million abstracts in over 3,400 medical journals. Connect charges are \$6 to \$12.50 per hour plus an additional \$24 per hour communications surcharges. An average search costs between \$5 and \$15.

Technology Database for Rural Areas, contains product descriptions, programs and innovative rehabilitation approaches for persons with disabilities. Contact Doris Bornhoeft, Office of Clinical Development, U. of N. Dakota, Box 8202, U. Sta., Grand Forks, ND 58202 (701) 780-2489.

ECONET a network of over 100 national and international development organizations. It was founded with a Apple Networking Grant and is supported by the McDonnell Douglas Corporation and the San Francisco Foundation. ECONET is presently expanding through the INTEL-SAT global satellite system. For more information, contact 1220 Brickyard Cove Rd. #100, Point Richmond, CA 94801 (415) 237-4713.

Newsletters, Magazines & Journals

MUMPS NEWS the newsletter of the MUMPS Users' Group, 4321 Harwick Rd., #510, College Park, MD 20740 (301) 779-6555.

Info-Notes, a quarterly newsletter on the microcomputer revolution's impact on social service agencies and suggestions on dealing with it. Write Lee-Haight Assoc., 7027 14th N.W., Seattle, WA 98117. \$15 per year.

Psychological Software Review, a newsletter from the Nassau Co. Psychological Assn. Write Psychological Software Review, 56 Willowdale Ave., Port Washington, NY 11050-3917.

M.D. Computing a bimonthly magazine for \$24.50 per year. It is a format similar to Newsweek and contains impressive graphics. Examples of articles in Vol 2/4 are Minimycin: A miniature rule-based system; Emergi-DOS—12 programs for Emergency Physicians; An introduction to computer-assisted medical decision making II; and A directory of Medical Software Companies. Write Springer Verlag, 175 5th Ave., NY, NY 10010.

Mobility Club News is a collection of information for the disabled from Fortress Scientific, 61 Miami St., Buffalo, NY 14204.

Journal of Rehabilitation Research and Development, published by the Veterans Administration, Department of Medicine and Surgery, Rehabilitation and Development Service, Office of Technology Transfer (153D), VA Medical Center, 50 Irving St. N.W., Washington, D.C. 20422.

Computer P.R. Update, a monthly publication by Cycon Communications, Inc., 376 East St. Charles Rd., Lombard IL 60148. \$185/per year. Write for sample issue.

Articles

Early Clinical Evaluation of a Robot Arm/worktable System for Spinal Cord Injured Persons, *Journal of Rehabilitation Research and Development* Vol 22 No. 1. pp. 38-58. Available from the US Government Printing Office, # 051-000-00171-1.

Computerized Service Delivery in Clinical Psychology *Professional Psychology Research and Practice*, Vol 16 #3, (June 1985) pp. 339-353.

The Use of Computers in Consultation Liaison Psychiatry, *General Hospital Psychiatry*, Vol 7 #2 (April 85) pp. 107-132. (5 articles).

Books and Reports

Mental Health Systems Software Directory, R. Green and C. Calderazzo (EDs). This directory lists 270 programs commercially distributed by 60 vendors in 11 areas of mental health, such as assessment, office management, interviewing, pharmacology, psychotherapy, etc. Available for \$10 from AAMSI, 1101 Connecticut Ave., N.W., Suite 700, Washington, D.C. 20036.

Rehabilitation R&D Progress Report, 1984, a 203 page assessment of activities by type of illness/disability. For information, contact the Veterans Administration, Department of Medicine and Surgery, Rehabilitation and Development Service, Office of Technology Transfer (153D), VA Medical Center, 50 Irving St. N.W., Washington, D.C. 20422.

Concepts and Issues in Health Care Computing, by H. Covvey, N. Craven & Neil McAlister, St. Louis: C.V. Mosby Co., 1985. 290 pp. This is the first in a series of books on computers in Health Care. It is a basic introduction to the subject.

Technology and Aging in America, U.S. Government Printing Office, (#052-003-00970-6) pp. 496, \$17, Washington D.C. (202) 783-3238. Excerpts from the report follow:

Effective use of both "low-tech" and "high tech" can help more older Americans live independently, concludes a major report released today by the Congressional Office of Technology Assessment (OTA). A variety of technologies can improve the health and functional ability of older persons, and possibly reduce health care expenditures, according to OTA.

New computer-based technologies can assist the severely disabled and those suffering from chronic and medical problems. These include programmable wheelchairs, voice-activated robots, and a variety of prosthetic devices. Many of these technologies, however, are experimental, relatively expensive, or primarily applicable only in health care institutions. They are less useful or relevant to the needs of most noninstitutionalized older Americans in managing their daily lives.

Health-promotion behaviors could reduce future prevalence of chronic conditions among the elderly. Low technology applications such as exercise regimens, smoking cessation, and improved diets can have short- and long-term benefits. Telecommunication applications in the home, such as video cassette players and personal computers, could provide information on health behaviors specifically developed for older persons. Similarly, two-way audiovisual telecommunications (i.e., "videotex") systems could provide information and instructions about self-health care. Videotex could also directly link patients' homes and physicians' offices for two-way communication and monitoring of medications and vital signs such as blood pressure.

Computer-based systems can make needed improvements in monitoring of prescription drug intake and in reporting of over-the-counter medicine usage by older consumers. Problems related to the elderly's high rate of prescription drug usage, especially when combined with numerous patent medicines, are dramatically increasing. Elderly patients and their health care providers need to be better informed of these dangers.

These high tech applications may be common in the future, but OTA stresses that numerous low technologies can also improve the daily lives of the elderly. Assistive devices ranging from wheelchairs to specially-designed utensils, when used in coordination with carefully-developed supportive care services, can help impaired older Americans remain out of institutions. OTA emphasizes the importance of accurately assessing functional status and the need for an organized system of long-term care to adequately respond to the emerging needs of the elderly.

In the home, appropriate design and relatively inexpensive adjustments of the living environment can greatly enhance the safety of older persons, especially those with impaired function. Prevention of falls, reduced risk of fire, and increased ease of safety in using appliances can often be simply and affordably achieved. Expansion of alternative housing options that reduce isolation and provide more supportive living environments could increase the comfort and convenience of daily living. High technology applications such as videotex would add home-based "electronic catalogues" for shopping, along with access to special programs, news, and direct banking services.

In the workplace, adequate information is lacking on the impact of automated manufacturing and recently-developed industrial robot systems on the less skilled older worker, says OTA. While some displacement of older workers in heavy industries may be occurring, opportunities for home-based work through the "electronic cottage" may evolve for older persons. Although labor force participation rates of the elderly continue to decline, OTA finds support among the elderly for innovative work arrangements and options.

MADD—Microcomputer Applications to Persons with Developmental Disabilities, the one stop resource guide to organizations, networks, publications, and conferences in this area. The new edition contains a supplement resource guide to Special Education software, with more than 30 listings of WISC-Rs, Psychoeducational Reports, Classroom Management Information Systems, etc. Write: Anne Breuer, Planet Press, P.O. Box 3477, Newport Beach, CA 92663-3418. \$5/issue; \$20/yr.

The *Computerized Society* published by the World Future Society Resource Center, 4916 St. Elmo Ave., Bethesda, MD. 20814, \$7. Information from the book advertisement follows:

The computer may be the greatest surprise that the twentieth century has produced.

While television, airplanes, and space travel were anticipated long before they existed, "the development and triumph of the computer seem to have surprised everyone," says Edward Cornish in *The Computerized Society*.

"Even after the computer had been invented, no one seems to have foreseen its eventual importance," writes Cornish, in his introduction to the volume. "IBM initially refused to manufacture computers and changed its mind only after other companies had entered the business."

The rapidity with which the computer has evolved has astounded even the computer enthusiasts, and more surprises may lie ahead.

In surgery, for example, tiny "microrobots"—resulting from the revolutions in computer technology and bioengineering—could "be introduced in to a person's circulatory system to make emergency repairs on a defective artery, clean up a blood clot, or chop away a cancer," according to Cornish.

Computers containing medical information on a variety of specific illnesses are already acting as "expert systems" for doctors to consult to be sure that every possible cause of illness has been checked. Patients may one day have access to such expert systems and check their home computer before visiting the family doctor.

Such new uses for computers may be greatly multiplied by the development of "supercomputers" that will have the power to solve problems beyond the capability of ordinary mortals. One computer company executive has predicted that a computer in the twenty-first century may have the power of 16,000 human brains.

Other trends and projections made in *The Computerized Society* include:

- A sampling of a small group of junior high school students indicates that many students believe computers may be helpful in sex education as "confidential computer tutors."
- By the year 2000, about one-third of the work force in industrialized countries will be "communicating" rather than commuting to work.
- By the early 1990s, mobility systems will enable robots to move freely in shipyards, construction sites, and even natural environments such as forests or fields.
- In a few years, a small antenna on your rooftop could give you access to hundreds of millions of pages information.

Personal Computers and the Family, a special issue of the journal *Marriage & Family Review*, Vol 8, No. 1/2 (Spring 1985), pp. 202, \$20 or \$10 if order 5+. Haworth Press, 28 E. 22nd St., NY, NY 10010. Contents are as follows:

Thoughts on Microcomputers, Families and Relationships/Computers and Metanetworks/Computers and Families: An Overview/Computers, People, and the Home/Home Computers: Implications for Children and Families/An Ethnographic Look at Personal Computers in The Family Setting/Home Computers and Family Empowerment/The Diffusion of Small Computers Among Households in Silicon Valley/The Impact of Small Computers upon Human Services Delivery to Families/A Computer System to Help Family Members Talk to One Another/The Dynamics of Family Interaction around Home Video Games/The Personal Computer as Marriage Counselor/Systems Psychotherapy, The Micro-Computer, and the American Family/The Digital Practitioner: Microcomputer Applications to Family Therapy/Support for the Family in the Post Industrial Society: The Integration of Career Development and Family Systems Therapy via Telecommunications/The Computer: Extender of Human Solitariness or Solidarity in the Chronicle of Life.

Computers and Family Therapy, a special issue of the *Journal of Psychotherapy & the Family*, Vol 1, No. 1/2. (Spring/Summer 1985), pp. 200, \$20 or \$10 if order 5+. Haworth Press, 28 E. 22nd St., NY, NY 10010. Contents are as follows:

Computers and Family Therapy: An Introduction/Computers, Family Empowerment, and the Psychotherapist: Conceptual Overview and Outlook/Barriers to Practitioners' Use of Informa-

tion Technology Utilization: A Discussion and Results/The Use of Computer in Marital and Family Therapy/A Computer Data Based Management System for a Family Therapy Clinic/Computer-Aided Assessment: Design Consideration/Microcomputers for Couple and Family Assessment: ENRICH and Other Inventories/MATESIM: Computer Assistance Analysis for Family Therapists/The Multiple Vantage Profile: A Computerized Assessment of Social Organization in Family Therapy/Knowledge Utilization and Decision Support Systems in Family Therapy/The Application of Computer Technology to Behavioral Marital Therapy/Teaching Systems Psychotherapy with Micro-Computers/Epilogue.

Computers, People and Productivity, a special issue of the *Journal of Organizational Behavior Management*, Vol 6, No. 3/4 (published April 85), pp. 183, \$20. Haworth Press, 28 E. 22nd St., NY, NY 10010. Contents are as follows:

Introduction: Productivity on a Chip? • Factors in Successful Implementation of Computer-Based Office Information Systems: A Review of the Literature with Suggestions for OBM Research • Physician Utilization of Computers: A Network of the Diffusion Process • Computer Fear and Addition: Analysis, Prevention and Technology and Organizational Structure: A Case Study in White Collar Productivity Improvement • The Impact of Computer Integrated Manufacturing Systems on the First-Line Supervisor • Skills, Motivation and Interdependencies: The Effective Use of New Computing Technology • Implementing Computerization in Hospitals: A Case Study of the Behavioral and Attitudinal Impacts of a Medical Information System • The Effects of Two Types of Automated Feedback on the Performance of a Community Mental Health Center Staff • A Case Study of Micro-Computer Utilization and Staff Efficiency: A Five-Year Analysis • Applications of Computer Technology to Learning Therapy • Book Reviews • Film Reviews.

Taking a Byte out of Computers: How to develop a Computer Information System for Discharge Planning Departments by B. P. Pinchbeck & A. Spen, \$25. Order from the Authors c/o Social Services Dept., Medical Center of Beaver County, 1000 Dutch Ridge Rd., Beaver, PA 15009

Software Announcements and Catalogues

Diagnostic Interview Schedule, Medical Review of Systems, and Office Management Systems are new software packages from PRN Systems, 222 N. Midvale Blvd. Suite 1, Madison, WI 53705 (608) 238-6668.

The *INTERACT System* provides production, rehabilitation and quality control software for vocational rehabilitation facilities. Contact Project INTERACT, Metro Industries, Inc., 1086 Brentwood Ct. Lexington, KY 40511. (606) 253-2658.

ScreenTalk (screen-reading program) and Word Talk (word processing program) and Brail Translating program, from Computer Aids Corp, 124 W. Washington, Lower Arcade, Ft. Wayne, IN, 46802

Chemical Dependency Software, for individualized treatment plans, evaluations, aftercare plans, self-assessments, and utilization review. PerGen, Inc., POB 64, Minneapolis, MN 55415. Demo disk is \$5.

What Color is your mind, a scientifically designed self-assessment software program that instantly measures how a person thinks, \$60. Write, Chipware, POB 110, Chester, NH 03036.

The *Tribal Information System*, a client based program management software package, offers resource, staff, program and case management. Contact the Diffusion Center, American Indian Law Center, Inc., POB 4456-Station A, Albuquerque, NM 87196 (505) 277-5462.

Software for the Sheltered Workshop, West Memphis, Arkansas (501) 732-2750 contains the following modules: donor mailing lists, client statistical data management, piece-rated payroll, employee leave records, contract bidding, individual program planning, and job/client matching.

Mental Health Systems Software Directory

Edited by Rex S. Green and Cynthia M. Calderazzo

This directory lists 270 programs commercially distributed by 60 vendors. Covers 11 areas of mental health applications, such as assessment, office management, interviewing, pharmacology, psychotherapy, etc. Send your check for \$10 per copy to AAMSI, 1101 Connecticut Avenue, N.W., Suite 700, Washington, DC 20036.

Upcoming Events, Conferences and Meetings

The Maryland Regional CUSS Group is having a meeting and software demonstrations on Oct 16, 1985. Contact Robert Elkin, 525 W. Redwood St., Baltimore, MD 21201 (301) 528-7655 ex 7960.

Computers and Disabled Persons, October 17-19. California State University, Northridge, CA. Contact Dr. H.J. Murphy, Coordinator, Disabled Student Services, CA State U., Northridge, 18111 Nordhoff St., Northridge, CA 91330 (818-885-2578).

Texas NASW State Convention, October 18-20, Dallas. Westin Hotel Galleria. Exhibits and sessions on automation are planned. Contact Sandra Smith (214-944-8261) or write B. Blumenthal, 5310 Harvest Hill, #298, Box 134, Dallas, TX 75230.

International Conference on Rural Rehabilitation Technologies, October 22-24, 1985 U. of N. Dakota Campus, Grand Forks, ND. Write Conferences Institutes, U. of ND, Division of Continuing Ed., Box 8277, U. Sta., Grand Forks, ND, 58202.

Automation Conference for Nonprofits, Oct 25. Graduate Center, City University of New York. Contact Ellen Goldner, CWIS/AIMS, 17 Lexington Ave., Box 520, NY, NY 10010 (212) 725-3156.

Computers: An enabling Technology, Oct 26, 1985. El Paso, TX. Contact the West Texas Association for the Handicapped, 8929 Viscount, Suite 101, El Paso, TX. (915) 591-0800.

6th Annual Southeast Augmentative Communication Conference, Oct 25-26, 1985. Hyatt Birmingham at Civic Center, Birmingham, AL. Contact SEACC-VI, United Cerebral Palsy, 2430 11th Ave. N., Birmingham, AL 35234

3rd Annual Computer Technology for Handicapped Conference, Oct 30, 31, Nov 1 & 2, 1985. Radisson S. Hotel, Minneapolis, MN. Contact Closing the Gap, POB 68, Henderson MN, (612) 248-3294.

California CUSS Network Group Resource Workshops, to be held at the Regional Meeting of the American Association on Mental Defi-

ciency. Oct 31-Nov 1., Oakland, CA. Write Jim Gardner, Fairview Developmental Center, 2501 Harber Blvd., Costa Mesa, CA 92626 for details.

Ninth Annual Symposium on Computer Applications in Medical Care, Nov 10-13. Baltimore Convention Ctr., Baltimore, MD. Contact SCAMC, George Washington U. Medical Center, Office of Continuing Medical Education, 2300 K St. NW., Washington, D.C., 20037.

Microcomputers in Human Services, Nov 20-21, Weston Hotel, Seattle, WA. This conference, sponsored by the DHHS Region X, is designed to help local agencies with their computing needs. How to and hands on sessions as well as vendor exhibits are planned. For information, contact Steven Ice, Dept. of Health and Human Services, Region X, MS 411, 2901 3rd Ave., Seattle, WA (206) 442 0526.

Ninth Annual National MSIS Users Conference, November 21-22, 1985. Orangeburg, NY. Write Nathan S. Kline Institute, Orangeburg, NY 10962

Training Workshops on ABLEDATA, [the database of 12,000 products for the disabled] on March 13-14, 1986 or April 17-18, 1986 at Catholic University of America. Contact NARIC, 4407 Eighth St. N.E., Washington, D.C. 20017 (202) 635-5826.

National Council of Community Mental Health Centers, April 2-5, 1986. Riviera Hotel, Las Vegas, NV. (Has an exhibit area with software vendors). Contact NCCMHC, 6101 Montrose Rd. #360, Rockville, MD 20852.

7th National Educational Computing Conference, June 4-6, 1986. Town Country Hotel, San Diego, CA. Write NECC '86, U. of San Diego, School of Education, Alcalá Park, San Diego, CA 92110.

MUMPS User's Group Conference, June 9-13, 1986. San Diego. Write MUMPS User's Group, 4321 Hartwick Rd., Suite 510, College Park, MD 20740. Papers due, Dec. 2, 1985.

9th Annual Conference on Rehabilitation Technology, June 23-27, 1986 Minneapolis, MN. Contact RESNA, Suite 700, 1101 Connecticut Ave., Washington, D.C. 20036.

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